

Amendments to the Claims:

Please cancel claims 1-20 and add new claims 21-38 as follows. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-20 (Cancelled).

Claim 21 (New). A medical image processing apparatus, comprising:

a feature vector producing section to analyze radiation image data including radiographed object image data corresponding to a radiographed object with plural different analyzing methods, to extract plural different features of the radiographed object image data and to produce a radiographed object image data feature vector constructed with vector element of the extracted plural different features;

a body part feature vector memorizing section to memorize plural body part feature vectors of plural different body parts in advance; and

a discriminating section to obtain a correlation degree between the radiographed object image data feature vector and

15 each of the plural body part feature vectors and discriminate a
body part corresponding to the radiographed object image data on
the basis of the correlation degree for each of the plural
different body parts.

Claim 22 (New). The medical image processing apparatus of
claim 21, wherein the discriminating section determines a body
part having the highest correlation degree among the plural
correlation degrees as the body part corresponding to the
5 radiographed object image data.

12
cont.
Claim 23 (New). The medical image processing apparatus of
claim 21, wherein the feature vector producing section extracts
each feature with a feature amount and the discriminating section
obtains the plural correlation degrees by providing the feature
5 amount of each feature with a different weight factor in
accordance with the kind of each of the plural different body
parts.

Claim 24 (New). The medical image processing apparatus of
claim 21, further comprising:

5 a radiographed object image region extracting section to
extract a radiographed object image region corresponding to the
radiographed object from the radiation image data corresponding
to a radiographed region.

Claim 25 (New). The medical image processing apparatus of
claim 24, wherein the feature vector producing section extracts
at least two features from the radiographed object image data
corresponding to the radiographed object image region.

as cont.
Claim 26 (New). The medical image processing apparatus of
claim 24, wherein the feature vector producing section extracts
the size of the radiographed object image region as one of the
features.

Claim 27 (New). The medical image processing apparatus of
claim 24, wherein the feature vector producing section extracts
the shape of the radiographed object image region as one of the
features.

Claim 28 (New). The medical image processing apparatus of
claim 24, wherein the feature vector producing section extracts a

characteristic value calculated on a basis of a signal variation between neighboring pixels as one of the features.

Claim 29 (New). The medical image processing apparatus of claim 28, wherein the characteristic value calculated on a basis of the signal variation is an edge distribution.

Claim 30 (New). The medical image processing apparatus of claim 29, wherein the edge distribution includes an edge orientation and an edge intensity.

A2
cont.
Claim 31 (New). The medical image processing apparatus of claim 21, further comprising:

an image processing section to determine a processing condition on the basis of the discriminated body part and to
5 conduct an image processing for the radiation image data on a basis of the processing condition.

Claim 32 (New). The medical image processing apparatus of claim 31, wherein the discriminating section discriminates a radiographing orientation with reference to the discriminated body part corresponding to the radiographed object.

Claim 33 (New). The medical image processing apparatus of claim 32, wherein the image processing section comprises an image processing condition memorizing section to memorize plural image processing conditions corresponding to at least one of the plural
5 different body parts and plural radiographing orientations.

Claim 34 (New). The medical image processing apparatus of claim 32, wherein the image processing section comprises a display section to indicate the image processing condition and a medical image corresponding to the processed radiation image
5 data.

*A2
cont.*
Claim 35 (New). The medical image processing apparatus of claim 34, wherein the image processing section comprises a selecting section to select an arbitrary image processing condition from plural image processing conditions indicated on
5 the display section.

Claim 36 (New). The medical image processing apparatus of claim 35, wherein the image processing section indicates plural medical images corresponding to plural sets of radiation image

Appln. No. 09/819,400
Amdt. dated April 14, 2004
Reply to Office Action of December 16, 2004

data obtained by plural image processing condition on the display
5 section and an arbitrary image processing condition is selected
with the selecting section on the basis of the plural medical
images indicated on the display section.

*as
could*
Claim 37 (New). The medical image processing apparatus of
claim 35, wherein the image processing section indicates a name
to specify the image processing.

Claim 38 (New). The medical image processing apparatus of
claim 35, wherein the image processing section indicates the
necessity of image rotation and the necessity of image inversion
together with the image processing condition.
